

Appl. No. 10/800,623
Response dated: December 10, 2007
Reply to Final Rejection of: August 13, 2007

REMARKS

Applicants acknowledge with appreciation the telephone interview on November 16, 2007, at which time the outstanding Final Rejection was discussed as well as further amendments to the claims in order to further distinguish the claimed subject matter, as broadly interpreted by the Examiner over the prior art of record. During the interview, the Examiner maintained her position that the claims, as broadly written, read on the prior art. It was pointed out that this was clearly not the case in that there was no suggestion in the prior art of culturing organic blue-green algae on the specified culture medium as defined in the claims.

During the telephone interview, It was pointed out that the culture medium was prepared first in accordance with the process described in the specification noting in particular claim 6. The Examiner appeared to appreciate that the culture medium which was prepared is then inoculated with the algae species.

The Examiner was advised during the telephone interview that the claim could be further modified by specifying that the method is characterized in that said method is carried out in an organic environment and stays free of contamination of inorganic additives and said culture medium contains high-nitrogen organic substance and without inorganic salts, which is fermented and aerated to give the culture medium a pH of 8 or greater. It was pointed out that this is clearly not suggested in the prior art and the Examiner tended to agree that this seemed to distinguish the claimed subject matter over the cited reference. However, the Examiner indicated that such a limitation would require a further search and that this would necessitate the filing of an RCE. Accordingly, the proposed amendment has been made the a RCE submitted herewith to allow a further prior art search.

Applicant has amended the claims to more particularly define the invention taking into consideration the outstanding Official Action. Applicant has amended claim 1 as discussed above and as fully supported by the specification at page 5, lines 2-3. Claim 3 has been amended to correct its dependency. Applicant submits that the claims now present in the application are fully supported by the specification as originally filed and no new matter is introduced.

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The rejection of claims 1, 3-5 and 11 under 35 U.S.C. 102(b) as being anticipated by Thompson has been carefully considered but is most respectfully traversed in view of the amendments to the claims and the following comments.

The invention of Thompson (US 4,267,038) is an improved controlled natural purification system for a wastewater treatment and protein conversion and recovery. The system consists of treatments in a tank complex where the waste organics are reduced to inorganic forms available for microalgae culture(see lines 1-3 and 6-8 of Thompson's abstract). Furthermore, Thompson also mentions that the waste organics are reduced in carbonaceous and nitrogenous stages to inorganic nutrient forms available for algal growth in the B-Tank complex 44(see column 8, lines 26-29). As described above, the citation categorically indicates that the algae are cultured in inorganic environment not in a pure organic environment. However, the culturing method of the amended claim 1 of the present invention is carried out in a pure organic environment and stays free of the contamination of inorganic additives, so the culturing environments are obviously different from each other between the present invention and the citation.

The key point of the comparison with the Thompson and the present invention is that "whether the culturing mediums for culturing algae of the Thompson and the present invention are the same or not?" The point should not be focused on "further adding or not adding the inorganic compounds into the culturing medium". According to the above description, it is obvious that the culturing medium of the **Thompson is an inorganic environment**; however, the culturing medium of **the present invention is a pure organic environment**. This is the most important difference between them. It is hard to understand why the Examiner thought the two culturing methods are the same.

The purposes of the invention are also different from each other as following reason. Thompson disclosed a **wastewater treatment**, and the reusable water can be utilized to produce algae. However, the present invention is to provide **an improved method to cultivate organic blue-green algae**. In light that organic blue-green algae are **highly sensitive organisms**, the **culture technology and process significantly**

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effect on the quality of culturing algae (referring to page 1 of the English specification of the present invention). Accordingly, culturing organic blue-green algae needs exact regulating technology, and not just cultivated in reused water without concern.

In the present invention, the pH level is elevated **by means of aeration and agitation** over a specific period of time without the addition of Na_2CO_3 , NaHCO_3 , NaH_2PO_4 , or other inorganic salts as pH adjuster or buffer in the culture medium. However, in the citation, the method of elevating pH level is **by reduction of CO_2** in solution (see column 29, lines 45-47 of the citation), so the methods for elevating pH level are different.

According to page 4, lines 13-15 of the final Office Action, the examiner indicates that "the medium of the present invention is not added with inorganic salts or carbonate compounds but edible microorganisms can be further added to the culture medium, which is disclosed in column 3 and lines 10-15 of the citation", but the part of the examiner's indication doesn't accord with column 3 and lines 10-15 of the content of the citation. The part the Examiner mentioned is only the description about the purpose of growth of algae. No any description shows that the culture medium is not added with inorganic salts. Consequently, we can't accept this viewpoint for rejection.

Accordingly, the method of the present invention does not been disclosed in the cited prior art US 4267038, especially the culturing environments.

In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all the claims now present in the application are most respectfully requested.

Respectfully submitted,
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